



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

(E). In this way the total of fifty-six sets of four sixes for 36 is obtained.

The remainder of the work begins with the comparison of such of the thirty-one sets for 36 with each of the fifty-six sets for 29. Although in upwards of forty cases one obtains consistent sets of eight sixes, all of these cases fail at the trial with the sets for 22, showing that the problem is impossible.

PROBLEMS FOR SOLUTION.

ALGEBRA.

283. Proposed by G. B. M. ZERR, A. M., Ph. D., Parsons, W. Va.

Solve $w+x+y+z=4a$, $w^2+x^2+y^2+z^2=4a^2+4b^2$, $w^3+x^3+y^3+z^3=4a^3+12ab^2$, $w^4+x^4+y^4+z^4=4a^4+4b^4+4c^4+24a^2b^2$.

GEOMETRY.

316. Proposed by J. STEWART GIBSON, Department of Physics, Wadleigh High School, New York City.

Determine the locus of the vertices of parabolas described by particles thrown off from the circumference of a uniformly revolving wheel.

CALCULUS.

239. Proposed by L. H. MacDONALD, A. M., Ph. D., Sometime Tutor in the University of Cambridge, Jersey City, N. J.

Of all triangles inscribed in a circle, find that which has the greatest perimeter.

MECHANICS.

202. Proposed by W. J. GREENSTREET, M. A., Editor of The Mathematical Gazette, Stroud, England.

Three equal, uniform, similar rods AB , BC , CD , freely jointed at B and C , are hung from a point by two equal strings attached at A and D . Find the position of equilibrium.

MISCELLANEOUS.

171. Proposed by W. J. GREENSTREET, M. A., Editor of The Mathematical Gazette, Stroud, England.

If $\lim_{x \rightarrow a} \frac{\phi(x)}{\psi(x)} = \lambda$, show $\lim_{x \rightarrow a} \left[\frac{\lambda}{\phi(x)} - \frac{1}{\psi(x)} \right] = \frac{\lambda\psi''(a) - \phi''(a)}{2\phi'(a)\psi'(a)}$.

ERRATA.

Page 97, line 10. Vol. XIII, for $x=y=w=$ etc., read $x=x_1=x_2=$ etc.
 Page 98, line 1, for $G+D+U$ read $G+D+U+B$, B taken from table.
 Page 97, in table add .008 to each number from 34 to 43 inclusive.